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Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

OCT 21 1996

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U.S. Environmental Protection Agency
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State of Washington
Department of Ecology
1315 West Fourth Avenue
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Messrs. Sherwood and Wilson:

AGREEMENT IN PRINCIPLE (AIP) INCLUDING PATH FORWARD FOR CANYON DISPOSITION INITIATIVE (CDI)

Attached is the final draft AIP for the CDI. This document was developed by the CDI Task Team which includes members from the U.S. Department of Energy, Richland Operations Office, the Environmental Restoration Contractor, Westinghouse Hanford Company, Transition Programs, the U.S. Environmental Protection Agency, and the State of Washington, Department of Ecology. Comments received from each of these members were incorporated into the final draft. The AIP was prepared to document the commitment of the three parties to support the continued evaluation of CDI alternatives in FY97. The AIP presents a path forward to reach a decision for the disposition of the five canyon facilities and a recommended regulatory pathway for the evaluation process. The AIP presents the results of the Task Team's process to determine technical and regulatory issues, a regulatory pathway for conducting the evaluation of alternatives, and the selection of a preferred canyon facility for the initial evaluation. The detailed technical evaluations will be conducted in FY97 dependent on the three parties agreement to proceed.

Discussions were initiated with stakeholders, through the Hanford Advisory Board (HAB) Environmental Restoration and Waste Management Committees. These discussions resulted in a letter of support from the HAB for continued evaluation of the CDI. Initial contact with the three affected Tribal Nations has also occurred.

If the proposed path forward and agreements presented in the AIP are acceptable please indicate your approval by signing and returning this package to the undersigned.

If you have any questions concerning the CDI, please contact Mr. J. D. Goodenough at (509) 376-0893.

Sincerely,

Linda K. Bauer, Assistant Manager
for Environmental Restoration

DDP:JDG

Attachment: As stated

cc w/attach:
R. R. Borisch, WHC
G. C. Henckel, BHI
J. J. McGuire, BHI

AGREEMENT IN PRINCIPLE (AIP)

Canyon Disposition Initiative (CDI)

I. Background:

In early 1995, Hanford Site representatives developed a concept paper for final disposition of the five major canyon facilities in the 200 Areas of the Hanford Site. This original concept involved the entombment of the canyon facilities, with waste disposal being conducted inside and around the canyon structure.

- The inside of the canyon facilities would be utilized for the disposal of radioactive wastes through Class C, which would avoid the development of additional near-surface burial grounds.
- The wastes would be encapsulated in the canyon with a plasticized cement to maintain structural integrity and to minimize migration potential.
- The wastes would be generated from the existing Hanford Site programs; including Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and solid waste.
- The use of CERCLA-generated soil wastes from the 100 and 300 Areas would be utilized as filler around the outside of the canyon facility to prepare a base for the engineered barrier.

The potential use of certain wastes for disposal around the canyons makes this alternative decision time critical, as this waste is being generated within the next few years and will not be available in the planning time frame (approximately the year 2020).

A project team with representatives from the Environmental Restoration Contractor and Westinghouse Hanford Company, Transition Projects, was assembled to involve the regulators in determining the path forward for dispositioning the canyon facilities. A commitment from the regulatory agencies was received in June 1996 to support the project team in determining the path forward.

This joint task project team has met in June 1996 and July 1996 to determine if the CDI should continue in FY97 or be deferred until it is currently planned for in the Environmental Restoration Projects Long-Range Plan (approximately the year 2020). The project team evaluated the pros and cons of a range of remedial alternatives, issues that may impact the selection of an alternative, and the preferred regulatory approach for the path forward. These evaluations were then used to identify potential road blocks and to provide the basis for a recommendation on whether to pursue further evaluation of the CDI in 1997 and the scope of work to be conducted.

II. Agreement:

This AIP documents the support by the attached signatories to utilize FY97 funding to continue evaluating the canyon disposition alternatives. The project team has reached the following consensus for the AIP.

- The CDI should continue to be evaluated in FY97.
- Funding for the CDI will not adversely impact the scope of work currently planned for 1997.
- *The CERCLA process will be utilized to determine the preferred alternative. for U-Plant, and on a case-by-case basis for the other canyon facilities. JAH for DOE
- All alternatives evaluated by the project team are viable, including the leave in place option with internal and external waste disposal.
- U Plant will be the first canyon building evaluated for alternative selections.
- The U.S. Department of Energy, Richland Operations Office (RL), commits to conducting a remedial investigation/feasibility study (FS) Phase 1 FS to screen the alternatives for dispositioning the canyons.
- If the time dependent alternative does not pass the RI/FS Phase I FS screening, the efforts on the CDI will be evaluated by the Three Parties before continuation of the project.
- RL, the U.S. Environmental Protection Agency, and the State of Washington, Department of Ecology, will be actively involved in the CERCLA documentation process and will continue to involve the stakeholders and the three affected Tribal Nations.
- RCRA will be an applicable relevant and appropriate requirement for the alternative analysis.

In support of this AIP, the following attachments from the task team are included:

Attachment 1:	Description of Alternatives
Attachment 2:	Pros/Cons of Alternatives
Attachment 3:	Preliminary Analysis of Regulatory Approaches
Attachment 4:	Pros/Cons for Determining First Canyon Facility to Be Addressed
Attachment 5:	Path Forward for FY97

*Telephone concurrence by Patrick Willison, OCC, USDOE-RL on 10/29/96. JD Goodenough DOE-AIME

Concurrence by:

Linda K. Bauer, Assistant Manager
for Environmental Restoration
U.S. Department of Energy
Richland Operations Office

10-24-96
Date

For Lloyd L. Piper, Assistant Manager
for Facility Transition
U.S. Department of Energy
Richland Operations Office

10/23/96
Date

for Douglas R. Sherwood
Hanford Project Manager
U.S. Environmental Protection Agency
Region X

10/27/96
Date

Michael A. Wilson, Manager
Nuclear Waste Program
State of Washington
Department of Ecology

10/29/96
Date

ATTACHMENT 1

Descriptions of Alternatives

This attachment summarizes the alternatives that were considered by the Canyon Disposition Initiative Task Team. The descriptions are written as if they addressed a single facility and can be applied to all of the facilities. The alternatives could also address the entire facility or part of the facility.

1. REMOVAL

a. **Removal and disposal at the Environmental Restoration and Disposal Facility (ERDF):** The facility will complete all deactivation efforts to meet the EM-40 criteria for transition, and the facility may become part of the surveillance and maintenance program, awaiting final disposition based on Environmental Restoration Project priorities. The facility will then be decontaminated and prepared for decommissioning. During decommissioning, the goal will be to maximize the amount of material that can be recycled in a cost-efficient manner, which will minimize the waste stream dispensed to the disposal facility. All waste will be classified to be acceptable for disposal at the ERDF.

b. **Removal and disposal (non-ERDF):** The general approach is the same approach mentioned in alternative 2.a. above. Depending on the regulatory approach, the wastes may not be acceptable for disposal at the ERDF, and alternate disposal sites would then be required. Depending on the waste characteristics and waste form, the wastes could be disposed of at existing Hanford Site facilities or at an offsite private facility.

2. IN SITU

a. **No action:** "No action" is included in all regulatory approaches as a baseline standard to determine the appropriateness of conducting a remedial action. The basic alternative would be to leave the facility in its current condition when it enters the EM-40 program and to provide surveillance and maintenance for the foreseeable future. Surveillance and maintenance would be performed if a risk analysis demonstrated that there were no adverse future impacts expected that would be caused by the facility.

b. **Decontaminate - leave in place:** This alternative would proceed with decontaminating the facility to reduce risks associated with existing facility. When the facility has been decontaminated to meet specified criteria, the facility would then be sealed and left as-is. Facility monitoring would continue for the foreseeable future according to an operations and maintenance plan. This alternative is similar to the "no action" alternative, with the exception that the contamination load in the facility will have been reduced to approved levels before the facility is left in place. The contamination load would also have to be

reduced to approved levels if a risk analysis demonstrated that there would be no adverse impacts resulting from the facility expected in the future.

c. **Entombment with internal waste disposal:** This alternative could minimize or eliminate the efforts required for facility decontamination. The facilities would be utilized for disposal of wastes from the environmental restoration remedial actions and from other Hanford Site programs (i.e., tank tools and hardware, low-level vitrification logs, etc.). The wastes would be layered in the facility using layers of concrete to encapsulate the wastes and provide for the facility's structural integrity when it is filled When the facility has reached disposal capacity, the facility would be covered with an engineered barrier and monitoring would be conducted per an approved operations and maintenance plan (or equivalent). This alternative is time critical in relation to the environmental restoration waste site remedial actions that will begin in 1996. The wastes from the remedial actions can be placed in the canyon facility and/or around the exterior of the facility to create the base for the engineered barrier. Final facilities disposition is currently not scheduled for approximately 20 years, which is the same time frame for completing waste site remedial actions. A decision will be required shortly for this alternative to be viable and affect the long-term planning for the canyons and the construction of new cells at the ERDF.

d. **Close in place - standing structure:** The facility would be deactivated and decontaminated to approved levels for in situ disposal. The structure would then be covered with an engineered barrier to minimize impacts to workers, the public, and the environment. This alternative would leave some contamination in place and would require monitoring per an approved operations and maintenance plan (or equivalent).

e. **Close in place - collapse structure:** This alternative is similar to alternative 2.d. above, with the exception that the structure is collapsed to approximately existing grade before being covered with an engineered barrier. This would minimize the impact to the future skyline in the 200 East and 200 West Areas. Monitoring would be required for the foreseeable future.

ATTACHMENT 2

Pros/Cons of Alternatives

The following tables provide the pros/cons from the Task Team brain storming sessions for implementing an alternative for dispositioning the canyon facilities in the 200 Areas of the Hanford Site. The eight alternatives (presented in Attachment 1) were reduced to three encompassing alternatives for the purpose of evaluating the pros and cons. The "no action" alternative was not evaluated at this time, but will be addressed in the CERCLA process.

Table 1 presents the pros and cons for the leave-in-place alternatives, which address the entombment of the standing structure with waste disposal internal and external to the structure. Table 2 presents the project team's pros and cons associated with the full removal of the canyon structure. Table 3 presents a leave-in-place alternative that assumes that the below ground structures (below the canyon deck) will remain intact. The structure below the canyon deck (cells) would be used for waste disposal, and an engineered barrier would be placed over the entire site.

The following assumptions were utilized as a general guide to develop the lists of pros and cons presented in this attachment:

- All alternatives will protect human health and the environment.
- No waste outside of the Hanford Site would be accepted for disposal.
- Waste generated from each alternative would be disposed of at the ERDF.
- The facility will remain below the 100 nCi/g limit for transuranic material.

Table 1. Leave in Place Option.

Pros	Cons
Regulatory requirements will be easily met if canyon is fully decontaminated	*Continued operations and maintenance costs. if facility is not clean when closed
*Cost savings will be realized compared to removal options	May not meet RCRA Minimum Technical Requirements (MTR)
Less worker safety issues compared to the hazards from removal	*Transuranic waste may be present in the canyon facility
*Canyons with waste disposal reduces the waste management footprint for the 200 Areas of the Hanford Site	Potential increased chance for groundwater contamination based on final waste loading
* Consistent with current future land use as described in FSUWG	Material for engineered barrier is needed
* Retrievable storage of waste forms is possible	*Public and stakeholder concerns related to skyline and groundwater protection
Concrete from the canyons utilized for a bio-intrusion barrier for the collapse in place option	Funding may be taken from other priorities (plateau vs. river)
*Disposition of the canyons is moved forward in the long-range plan	Land disposal restriction requirements for waste disposal option
*Good precedence for DOE complex	
Provides opportunity for technology support	
Surrounding waste sites and canyon ancillary facilities are closed at the same time	
Less leachable/better shielding in existing form (canyon is an engineered barrier)	
Provides a beneficial use of an existing resource	

* = applies to all leave-in-place options

Table 2. Canyon Removal Option.

Pros	Cons
Regulatory requirements for closure are met	Cost
When completed, no additional surveillance and maintenance is required for the facility	Increased worker safety issues associated with industrial and radiological hazards
Consolidated waste at a single disposal facility	Scheduled for the year 2020+ time frame
Skyline is reduced	More disposal facility capacity is needed for canyon wastes
May meet public and stakeholder values	Increased impacts on the environment (hauling, ERDF additions, surrounding waste sites)
Consistent with future site uses working group recommendations	Loss of available resource: canyon facility for waste disposal
Positive effect to local community for demonstration of clean-up	May not be able to dispose all material on the site
Less interference from competing programs and infrastructure	Disturbing surrounding waste sites may increase the potential for releases to air and groundwater
Concrete from removal of canyons could be used for bio-intrusion barriers at tank farms and ERDF	Removing an existing engineered barrier
Platform for demolition techniques	

Table 3. Leave In-Place - Collapsed Structure.[1]

Pros[2]	Cons
Less barrier cap material required	Facility waste loading capability is reduced
Less impact to the skyline	May require near-by waste sites and facilities to be addressed separately
Smaller footprint for the barrier	Increased worker safety issues compared to leave in-place option
May be more acceptable to stakeholders	Surface area of wastes is increased which may increase leachability
Safer work environment compared to removal option	More decontamination work would be required compared to leaving the structure standing
Faster to implement	Less reduction in the ERDF footprint

[1] The cost was assumed to be the same as the entombment option for this evaluation
[2] The pros were compared to the other leave-in-place options.

The major pros and cons for the time-dependent alternative of canyon entombment can be summarized as follows:

Pros:

- Supports Hanford Site goals: utilizes the canyon buildings as an asset rather than a liability.
- Waste disposal facility size reduction - Reduce the ERDF footprint by using the 100 and 300 Area wastes for barrier fill around the canyon facilities.
- Cost reductions - Initial evaluations predict a cost avoidance of $2 billion for the entombment option.
- Worker safety - The anticipated reduction in decontamination efforts will reduce the worker exposure to radiological and industrial hazards.

Cons:

- Public and stakeholder opinion: it is anticipated that the concept of leaving the waste in place and the resulting impact to the skyline may not be acceptable to all concerned parties.

- Regulatory issues - The entombment option with waste disposal does not presently have a corollary that defines the path through the regulatory system.

Preliminary Analysis of Regulatory Approaches

An initial review of regulatory pathway alternatives was considered by the Canyon Disposition Initiative Task Team. Pathways were addressed in two phases. The Phase I considers the regulatory approach to analyze alternatives and select a preferred alternative. The Phase II specifically addresses the regulatory approach for utilizing the canyon facility for entombment with waste disposal. The entombment with waste disposal approach was considered the most challenging from a regulatory perspective and was considered to bound the analysis. The regulatory approaches that were considered are presented in the following sections.

I. Resource Conservation and Recovery Act (RCRA)

Dispositioning canyon facilities via RCRA would be conducted using a two-phase approach. Phase I would involve decontaminating and/or removing and/or relocating contaminated materials. Phase I could be accomplished by preparing a canyon-complex-specific closure plan and/or a RCRA Facility Investigation/Corrective Measures Study (RFI/CMS). In any event, the Hanford Facility Dangerous Waste Permit would be modified to include canyon disposition. Phase II would encompass permitting the canyon complex and associated soil cover, via the Hanford Site Dangerous Waste Permit, to receive waste generated from other Hanford Site activities.

Advantage:

1. Permitting Phase II under RCRA would allow all waste meeting future waste acceptance criteria to be disposed in the canyon complex without separate decision documents created to address waste disposition (e.g., treatment, storage, and disposal [TSD] waste must have a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) decision document before being sent to the ERDF; since Phase II of the canyon disposition would be a permitted RCRA TSD unit, a separate decision document would not be necessary).

Disadvantages:

1. National Environmental Policy Act (NEPA) documentation would be required; an environmental impact statement could possibly be required as well, which could take up to 15 months to obtain a record of decision.

2. Formal regulatory permits and approvals would be required because RCRA does not have the same exemptions for administrative requirements allotted through the CERCLA process.

3. Implementing disposition under RCRA would not be in accordance with the strategy for implementing decommissioning under CERCLA at the Hanford Site, which is targeted for inclusion in the next amendment to the Hanford Federal Facility Agreement and Consent Order.

II. CERCLA

Canyon facilities would be dispositioned in a two-phase approach utilizing CERCLA. Phase I and II (described above) would be accomplished using the CERCLA remedial action process. A Remedial Investigation/Feasibility Study (RI/FS) document would be prepared covering final disposition and the operation of a disposal facility (similar previous ERDF accomplishments). The RCRA interim status TSD units that are contained within each canyon complex would not have a separate closure plan but would be included in the RI/FS. In any event the Hanford Site Dangerous Waste Permit would be modified to include closure of any RCRA TSD unit contained within a given canyon complex.

Advantages:

1. Separate NEPA documentation would not be required, as NEPA values are incorporated into CERCLA documents.

2. No regulatory permits are required under CERCLA, however, all substantive requirements must be met.

3. One decision document would cover both phases of the disposition process.

4. The approach would be consistent with the strategy for conducting decommissioning under CERCLA at the Hanford Site.

Disadvantage:

1. Waste generated from RCRA TSD units would be accepted based on CERCLA decision documents that address final disposition of waste (i.e., the same dilemma as the ERDF).

III. CERCLA (Phase I)/RCRA (Phase II)

Phase I of the canyon disposition would be accomplished using one CERCLA decision document similar to that described in Section II above. Phase II, which involves disposal facility operation, would be implemented under RCRA similar to the description provided in Section I above.

Advantages:

1. Permitting Phase II under RCRA would allow all waste that meets future waste acceptance criteria to be disposed to the canyon complex without separate decision documents created to address waste disposition (e.g., TSD waste must have a CERCLA decision document before being sent to the ERDF; because Phase II of the canyon disposition would be a permitted RCRA TSD unit, a separate decision document would not be necessary).

2. The approach would be consistent with the strategy for conducting decommissioning under CERCLA at the Hanford Site.

3. NEPA documentation would not be required for Phase I, because NEPA values are incorporated into CERCLA documents.

4. No regulatory permits would be required for Phase I given exemptions under CERCLA.

Disadvantages:

1. Permits and NEPA documentation would be required for Phase II, as RCRA does not have the same exemption-from-administrative requirements that are allotted under CERCLA.

2. Two public reviews would be required, one for each phase.

The Task Team concluded that the Phase I approach should be conducted as a CERCLA action. The Phase II (waste disposal) approach should maintain the options to proceed under either the RCRA or CERCLA path and will be determined if entombment with waste disposal is the selected alternative. This recommendation is based on the following summary of pros and cons for the Phase II approach:

Regulatory Pathway for Waste Disposal Alternative

Pros	Cons
RCRA: - All RCRA waste forms can be accepted - Viewed by stakeholders as a more controlled approach	- A greater administrative burden - A current model is not available for proceeding on this path - Greater time and cost commitment to obtain decision document - Exemptions from other permits; e as in CERCLA
CERCLA: - Time and cost commitment not as great as RCRA permit approach - Availability of permit exemptions - More efficient administrative process - Precedent exists for the ERDF	- May not be able to accept all RCRA wastes

PROS/CONS FOR DETERMINING FIRST CANYON FACILITY TO BE ADDRESSED

Table 1 below provides an abbreviated analysis of five key characteristics involved in the selection of the initial candidate canyon for entombment. A negative in any column represents one or more issues associated with that characteristic which, if that canyon were to be chosen as the initial canyon entombed, have a significant potential for delaying the start of physical activities.

The shielding aspects of the canyons are all similar. The structural commonality column refers to the extent to which techniques and facility-specific design performed on one canyon would be applicable to other canyons. The B, T, and U Plants all were built to the same original designs. Over the years, each plant has had some degree of modification and each has had a unique use. However, these three canyons are structurally very similar. The Plutonium Uranium Extraction (PUREX) facility canyon has many similarities to B, T, and U Plants; however, it is significantly larger, has a fourth gallery, and has tunnel storage capability. The Reduction Oxidation (REDOX) plant is only about half as long, and with the tower is about twice as tall as the other canyons; therefore, the similarities to the other canyons are far fewer.

One of the most important considerations is the absence of a mission for the canyon or other structures within the immediate area of the canyon. Most of the facilities have active systems of some type (e.g., fire water, transfer lines, uranium storage, and etc.) in their vicinity, so the issue is whether or not relocation is relatively simple.

The "interior waste loading" column refers to the near-term capability to place waste within the building. The "exterior waste loading" column refers to the near-term capability to place waste around the entire building. In the latter case, missions of surrounding facilities have a larger role than in the former case.

All canyons contain radioactive contaminates. The ratings in this column were based upon the relative amounts of contamination, particularly transuranic contamination. Although B Plant has significant levels of cesium and strontium contamination, the relatively short half lives of these materials made them less of an issue than the plutonium and other long-lived radionuclides at PUREX or REDOX.

Using the information provided in Table 2, the project team evaluated the pros and cons of proceeding with U Plant as the first canyon facility to be addressed.

Table 1. Evaluation of Canyons for Selection of Initial Canyon as an Entombment Candidate.

Facility	Structural Integrity	Exterior Waste Loading	Interior Waste Loading	Characterization	Contamination Levels
U Plant	+	+	+	0	+
B Plant	+	- (WESF Cs/Sr store)	+	+*	0 (Cs/Sr)
T Plant	+	- (equipment decontamination)	-	0	+
PUREX	0	0 (tunnel store)	+	+	-
REDOX	-	- (222S Laboratories)	+	-	-

* Characterization being performed as part of transitioning anticipated complete prior to entombment readiness.

\+ = No significant issue identified
0 = Issues of a manageable nature in near term
\- = Significant issues inhibiting near term entombment

Table 2. U Plant

Pros	Cons
Best support for time dependent alternatives	Does not address all issues that will be encountered at the other canyon facilities
Lower contamination levels	The proximity of the UO3 building
No transuranic issues expected	Less characterization data available
Fewer regulatory hurdles expected	Site preparation increased
Potential for lower costs	
No continuing mission	
Canyon crane is in good condition	

The project team consensus was to utilize U Plant as the first canyon facility to be addressed by the Canyon Disposition Initiative project.

PATH FORWARD FOR FY97

The project team determined a need to perform a screening step for the Canyon Disposition Initiative (CDI) project. The screening step will evaluate three of the alternatives that are representative of issues that may impact the project. The three alternatives include: 1) complete removal, 2) leave in place with the standing structure (which includes the entombment with waste disposal option), and 3) leave in place collapsing the structure to grade. This will be the first step in FY97 and will include the following:

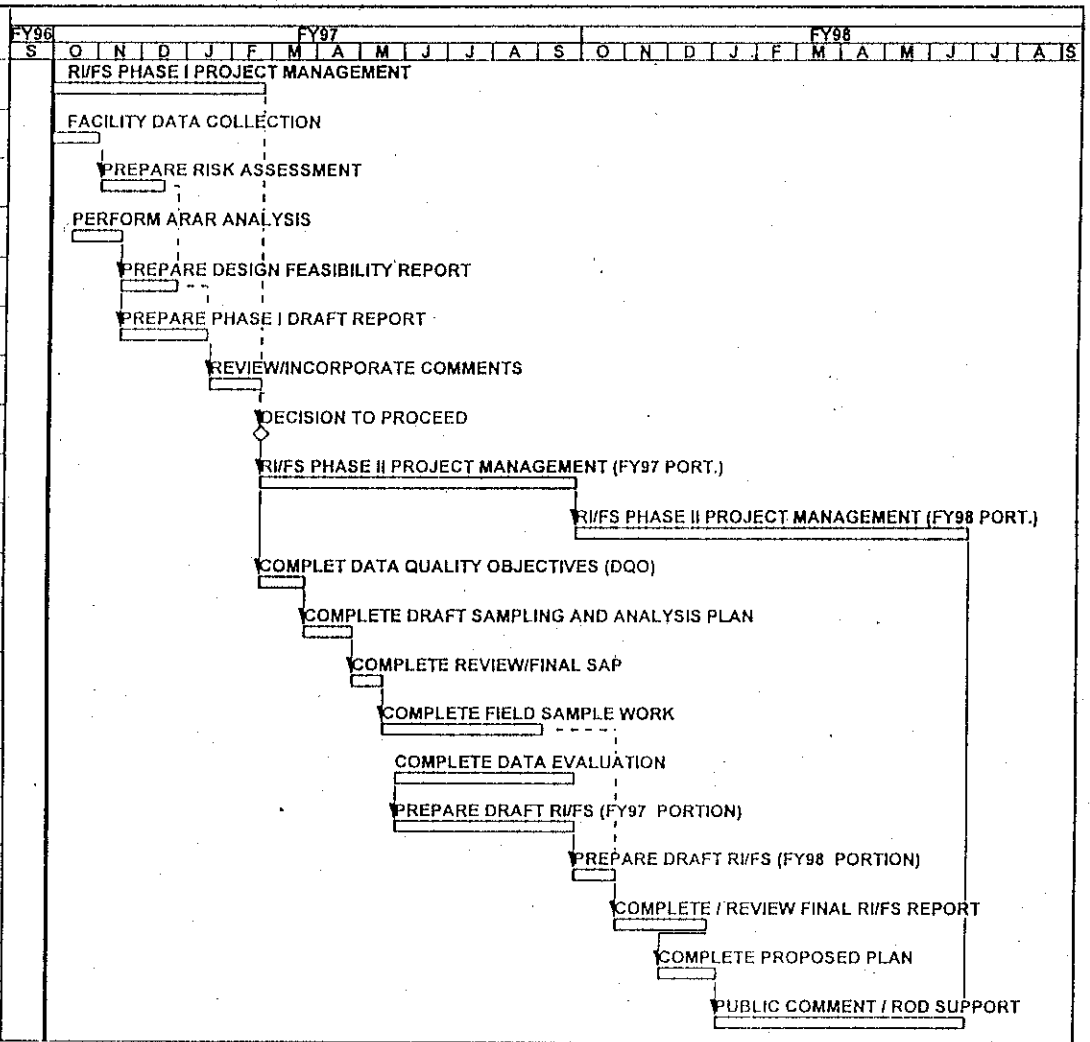
- Conduct an analysis of applicable, relevant, and appropriate requirements to determine if regulatory obstacles exist.
- Identify assumptions that are necessary to evaluate the alternatives.
- Conduct a preliminary risk assessment of the three alternatives.
- Identify information gaps that are determined throughout the screening process.
- Develop rough order-of-magnitude cost estimates for the three alternatives.
- Develop a regulatory approach for waste disposal options.

Screening will be conducted as a Remedial Investigation/Feasibility Study (RI/FS) Phase I FS. At the completion of the screening step, a decision will be made whether to proceed with the remaining characterization and completion of the RI/FS process to reach a record of decision (ROD) at this time.

Figure 1 below is a preliminary schedule for the CDI project for planning purposes. The schedule assumes that the project will require additional characterization, and this effort will require four months to be finished. The actual characterization effort will be determined with the regulators in a data quality objectives process.

The costs for proceeding with the CDI project are presented in Table 1 below. The costs are separated into the Phase I costs and the estimated remaining project costs to reach the ROD.

Activity ID	Orig Dur	Rem Dur	% Comp	Early start	Early finish	Chrg. Code
D9200CS100	99	99	0	01OCT96	24FEB97	BY000
D9200CS105	24	24	0	01OCT96	01NOV96	B1300
D9200CS110	30	30	0	04NOV96	17DEC96	B1A00
D9200CS115	25	25	0	15OCT96*	18NOV96	B1000
D9200CS120	25	25	0	19NOV96	27DEC96	B1D00
D9200CS125	39	39	0	19NOV96	17JAN97	B1000
D9200CS130	25	25	0	20JAN97	24FEB97	B1000
D9200CS140	0	0	0		24FEB97*	
D9200CS205	152	152	0	25FEB97	30SEP97	BY000
D9200CS207	189	189	0	01OCT97	01JUL98	BY000
D9200CS210	23	23	0	25FEB97	27MAR97	B1330
D9200CS215	23	23	0	28MAR97	29APR97	B1300
D9200CS220	15	15	0	30APR97	20MAY97	B1300
D9200CS225	75	75	0	21MAY97	08SEP97	B6A00
D9200CS230	85	85	0	30MAY97*	30SEP97	BB000
D9200CS235	85	85	0	30MAY97	30SEP97	BH100
D9200CS237	21	21	0	01OCT97	29OCT97	BH100
D9200CS240	42	42	0	30OCT97	02JAN98	BH200
D9200CS245	26	26	0	01DEC97	08JAN98	BW100
D9200CS250	122	122	0	09JAN98	01JUL98	BJ000



Project Start 01OCT96
Project Finish 01JUL98
Data Date 01OCT96
Plot Date 25JUL96
© Primavera Systems, Inc.

Early Bar
Progress Bar
Critical Activity

DD01:D900

Sheet 1 of 1

200 AREA CANYON STRATEGY
FY97 P3 SHELL
MYWP Development Schedule

DRAFT

Figure 1. Preliminary Schedule for the CDI Project.

Table 1. Canyon Disposition Cost Estimate

FY97 TASK	$ (x000)
Phase I RI/FS	
RI/FS Phase I Project Mgmt	72.0
Facility Data Collection	23.5
Preliminary Risk Assessment	69.5
ARAR Analysis	21.5
Design Feasibility Report	124.0
Phase I Draft report	32.0
Finalize Phase I report	22.0
Decision to Proceed	---
Subtotal Phase I	364.5
RI/FS:	
Phase II&III RI/FS	
RI/FS Phase II&III Project Mgmt	129.0
DQO Process	45.0
Sampling and Analysis Plan (SAP)	11.0
Finalize SAP	5.5
Field Characterization *	1,075.0
Data Evaluation	67.5
Prepare Draft Phase II&III report	80.0
Subtotal Phase II&III	1,413.0
(FY97)	
FY97 Total	1,780**

* Assumes $1 million for field work. Actual scope and dollars will be determined in the DQO process.

** Does not include all adders for total cost.

*** Costs for remedial design in FY98 are not included.

FY98	
Project Management FY98	143.5
Prepare Draft Phase II&III report	14.0
Finalize Phase II&III report	45.0
Proposed Plan	23.0
ROD Support	113.0
Subtotal FY98***	338.5
FY99	
Remedial Design	TBD
Remedial Action	TBD

* Assumes $1 million for field work. Actual scope and dollars will be determined in the DQO process.

** Does not include all adders for total cost.

*** Costs for remedial design in FY98 are not included.